



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,048	09/30/2003	Kang-Chung Cheng	US920022	7711

7590 11/15/2005

Han-Yi Lee
BAYSHORE PATENT GROUP, LLC.
520 Chantecler Dr.
Fremont, CA 94539

EXAMINER

HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
----------	--------------

2677

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/677,048	Applicant(s) CHENG, KANG-CHUNG	
	Examiner Chante Harrison	Art Unit 2677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16 is/are rejected.
- 7) ☒ Claim(s) 8-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 8/10/05.
2. Claims 1-13 and 16 are pending in the case. Claim 1 is an independent claim. Claims 1-4, 6, 8, 11, 13 and 16 have been amended. Claims 14-15 have been cancelled.

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 14 has been renumbered as claim 16.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of both "and " and "or" to relate or combine the last two claim limitations renders the claim indefinite.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 7, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Peter Johnson et al., US 6,622,185 B1, 9/2003.

As per independent claim 1, Johnson discloses an universal asynchronous receiver/transmitter interface for receiving state data for outputting said state data in a serial mode (i.e. IIOB, intelligent interface module, includes UART and captures the state change data for processing) (col. 7, ll. 28-37; col. 13, ll. 15-50); and a microprocessor (Fig. 4 "410") coupled to said universal asynchronous receiver/transmitter interface (Fig. 4 "410" connected to dual port RAM including UART) for outputting a displaying signal in corresponding to said data output by said universal asynchronous receiver/transmitter interface (col. 8-9, ll. 57-7); and a multi-segment display module coupled to said microprocessor for displaying a symbol in corresponding to said display signal (col. 12-13, ll. 65-3); wherein said data is generated by a BIOS program of said data processing device and/or *said state data is generated by a detecting application program of said data processing device* (Examiner interprets the last limitation in the alternative) (i.e. for every state change the IIOB generates a data packet for processing) (col. 8, ll. 25-45).

As per dependent claim 2, Johnson discloses said multi-segment display module is composed of at least one seven-segment display (col. 12, ll. 65-67).

As per dependent claim 3, Johnson disclose said data processing device is a serve or a personal computer (i.e. application executed within a computing system) (abstract; FIG. 2).

As per dependent claim 4, Johnson discloses said symbol is a numeral, an English letter or a specific character (col. 12-13, ll. 65-3).

As per dependent claim 7, Johnson discloses said state displaying device is connected externally to a serial port (i.e. the gaming machine for displaying the state data is connected to UART within the dual port RAM) (Fig. 3; col. 13, ll. 20-50).

As per dependent claim 16, Johnson discloses said detecting application program is executed in an operating system of said data processing device (i.e. application is executed in a platform independent programming environment) (abstract).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peter Johnson et al., US 6,622,185 B1, 9/2003.

As per dependent claim 6, Johnson discloses an external interface for providing communication capabilities between differing systems (Fig. 3 "311").

Johnson fails to disclose said state data output by said universal asynchronous receiver/transmitter interface complies the specification of RS-232.

It would have been obvious to one of skill in the art to include an interface that complies with the specification of RS-232 with the method of Johnson because an external interface provides a common connection over which data is shared or exchanged between differing devices which provides the benefit of being able to reliably transmit and receive data signals between differing devices in the same manner as a RS-232 specification defines the protocol and connection standards for communicating data between devices.

Art Unit: 2677

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as applied to claim 1 above, and further in view of Kazuyoshi Imakeki et al., US 4,570,160, 2/1986.

As per dependent claim 5, Johnson discloses a serial port UART for transmitting and receiving data (col. 7, ll. 28-37; col. 13, ll. 15-50).

Johnson fails to disclose said UART interface including transmitting, receiving, power and grounding lines.

Imazeki discloses said universal asynchronous receiver/transmitter interface includes a data transmitting line Tx, a data receiving line Rx, a power line and a grounding line (Gnd) (abstract; col. 3, ll. 51-57).

It would have been obvious to one of ordinary skill in the art to include Imazeki's UART interface including transmitting, receiving, power and grounding lines with the method of Johnson because the UART of Johnson is used to receive and transmit data to result in the display of characters and the inclusion of power and grounding lines provides the benefit of facilitating the transmission of data for display.

5. Claims 8-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awd can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2677

Ch
October 26, 2005

**AMR A. AWAD
PRIMARY EXAMINER**

